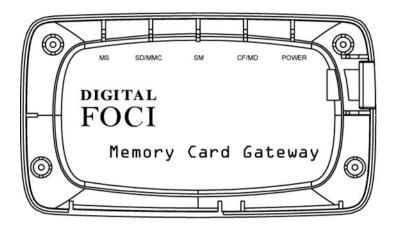
FOCI

Memory Card Gateway™

USB 2.0 Multi-Format Card Reader/Writer

User's Guide



Memory Card Gateway™

User's Guide

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Memory Card Gateway $^{\text{TM}}$ User's Guide

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Welcome!

Congratulations on purchasing your new Memory Card GatewayTM USB 2.0 Multi-Format Memory Card Reader/Writer. With this device you will be able to access and organize digital media files contained on virtually all memory card formats with your Windows $^{\mathbb{R}}$, Macintosh $^{\mathbb{T}M}$, or Linux $^{\mathbb{R}}$ based computer.

Using the Memory Card Gateway™ with your computer you can:

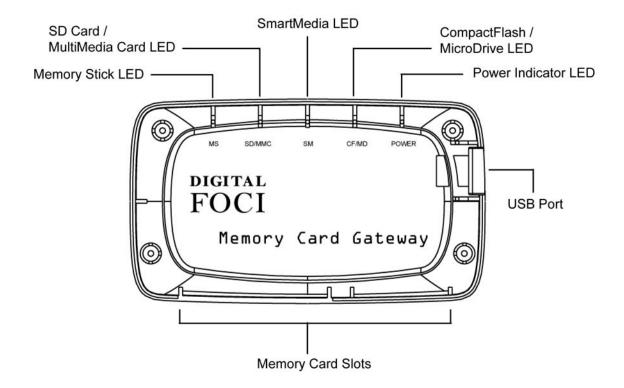
- Read, write, and erase files on your memory cards with ease
- Back-up, transfer, and copy files between your computer and your memory cards
- Back-up, transfer, and copy files directly from memory card to memory card
- Transfer files between Windows/Macintosh/Linux based computers by using the Memory Card Gateway™ as a bridge
- View and organize the contents of your memory cards
- Check the properties and capacity usage of your memory cards
- Format your memory cards

The Memory Card Gateway™ has been tested to support the following memory card formats*:

- CompactFlash® (CFTM)
- MicroDriveTM / CompactFlash 2 (CF Type-II)
- SmartMediaTM (SM)
- MultiMedia CardTM (MMC)
- SD Card (SDTM)
- miniSDTM
- Memory StickTM and Memory Stick compatible family of formats
 - Memory Stick and MS with Memory Select Function
 - o MS PRO
 - o MS Duo
 - o MS PRO Duo
 - MagicGate MS / PRO / Duo

^{**} See tested compatibility chart on page 25 for more information.

Device Layout



System Requirements

- Computer running any of the operating systems supported:
 - Windows[®] 98/SE^{**}, Windows[®] 2000^{**}, Windows[®] ME, Windows[®] XP Home, Windows[®] XP Professional
 - Macintosh[™] OS 8.6^{**}, OS 9.x and OS 10.x or higher
 - o Linux® OS kernel versions 2.4.x or higher
- One available USB port

^{**} For Windows 98/SE, Windows 2000, and Macintosh OS 8.6, CD-ROM drive is required since device driver installation is mandatory.

Memory Card Gateway $^{\text{TM}}$ User's Guide

Package Contents

Before using your device, check that your package contains the following items:

- Memory Card Gateway™
- 5-pin miniUSB Cable
- Velcro® removable mounting pad
- Resource Disc
- Quick Start Guide

Getting Your Memory Card Gateway™ Ready to Use

For Windows 98/SE, Windows 2000, and Macintosh OS 8.6, device driver installation is required. (For instructions, refer to the Driver Installation section starting on page 15.)

For all other supported computer operating systems, device driver installation is not required.

For all Windows operating systems, it is recommended that you install the Disk Monitor Utility from the Resource Disc. This program will assign descriptive icons and labels for the device.

- Connect the smaller end of the miniUSB cable to your Memory Card Gateway™.
- 3. Wait for your computer to recognize and activate the device. The Power LED on your device will light up red when it is ready to use.
- 4. Your computer will assign drive letter names for each of the 4 memory card slots. The drive letter names assigned will vary based on the drive letters that are currently being used by your computer.

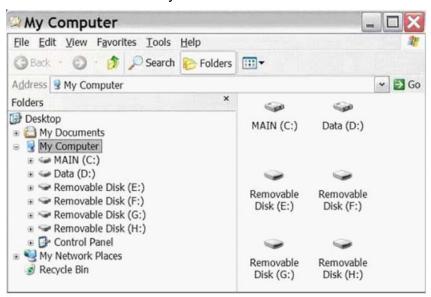
For instance, if your computer is using the (C:) drive as your main hard disk drive and the (D:) drive as your CD-ROM drive, and the next 4 letters are not being used, then your device will use the next 4 letters (E, F, G, H) for the memory card slots.

In the case of this example, from top to bottom (first to last), the drives will appear in the following order:

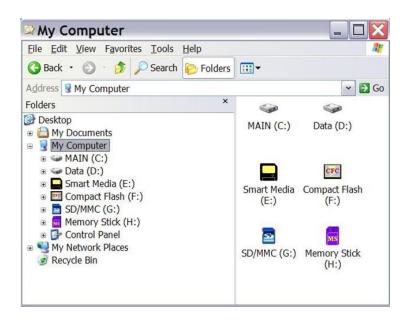
- 1) SmartMedia (E:)
- 2) CompactFlash / MicroDrive (F:)
- 3) SD Card / MultiMedia Card (G:)
- 4) Memory Stick (H:)

5. To verify that the device has been set-up correctly, perform the following check:

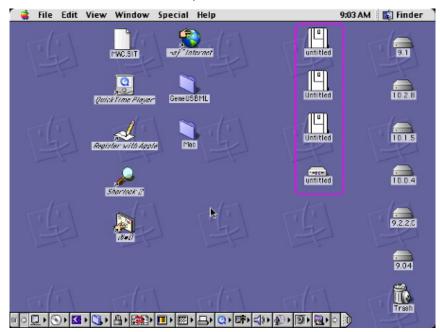
<u>For Windows</u>: Open a My Computer window or a Windows Explorer window and verify that 4 'Removable Disk' icons have been added. Each icon represents one of the 4 memory card slots on the device.



For systems without the Disk Monitor Utility installed, the memory card slots drive assignments will appear as generic 'Removable Disk (x:)' icons. Systems that are running Disk Monitor Utility will replace those generic icons with descriptive icons and labels as shown below.



<u>For Mac</u>: The computer will automatically create 4 icons on the desktop. Each icon represents one of the 4 memory card slots on the device.



<u>For Linux</u>: Check the drive management function and verify that 4 new drives have been added. Each drive represents one of the 4 memory card slots on the device.

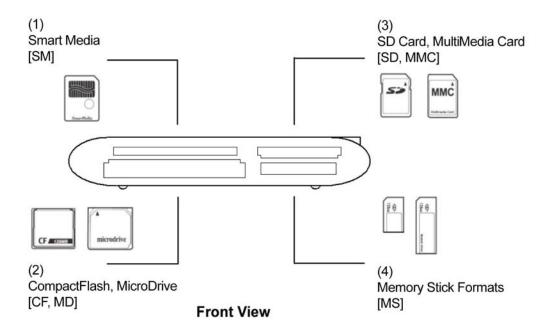
Using Your Memory Card Gateway™

Once you have connected your Memory Card Gateway $^{\text{TM}}$ to a computer, you are ready to start using it.

After inserting a memory card into its proper slot, the device will allow you to access the contents of that memory card just as you would access the contents of the hard disk drive on your computer. You can use it in the same way that you use the hard disk drive to move, copy, edit, view, and delete files.

Card Slot Descriptions

Your device has 4 memory card slots that allow you to simultaneously access and transfer data between the 4 card slots and your computer. Each slot is designed to support a specific set of memory card formats.



The memory card slot assignments and their respective LED labels are described here:

- (1) **SM**: supports the SmartMedia format.
- (2) **CF/MD**: supports CompactFlash Type I/II and MicroDrive formats.
- (3) **SD/MMC**: supports SD card, miniSD, and MultiMedia Card formats.
- (4) MS: supports all Memory Stick formats (Memory Stick, PRO, Duo, MagicGate).

Inserting Memory Cards

Each memory card should be inserted in the manner explained below:

- MS: Position the MS card with label side facing up and connector side pointing forward.
- **SD/MMC**: Position the SD/MMC card with label side facing *up* and connector side pointing forward.
- SM: Position the SM card with gold connector side facing down and pointing forward.
- **CF/MD**: Position the CF/MicroDrive with label side facing *up* and connector side pointing forward.

Push the card in gently until you feel a slight "click" and the memory card connectors make contact with the device. The corresponding LED will light up.

Note: For MS DUO and miniSD use the adapter provided by the manufacturer of the memory card.



<u>Warning</u>: Take special care to insert the correct memory card type in its designated slot. If the memory card does not slide in easily, double-check that you are inserting it in the correct slot and in the correct manner.

Once the memory card is properly inserted, its respective LED will light up and the card will be accessible.

LED Indicators

The Memory Card GatewayTM uses LED indicators to let you know its operational status. There are 5 LED indicators:

- 1 LED indicates the power status of the device.
- The other 4 LEDs indicate the activity of each of the 4 memory card slots.

(Refer to Device Overview section on page 5 for a diagrammed view.)

Power LED

When the device is plugged in and receiving power, the LED for the power indicator will turn red.

Memory Card Slot LED

- If there is no memory card inserted in the memory card slot, the corresponding LED will not be lighted.
- Once a memory card is inserted properly, the corresponding LED will light up and remain lighted until the card is removed. The color of the LED will be different for each memory card slot.
- When data is being accessed on or written to a memory card, the corresponding memory card slot LED will flash until the operation is complete. It is possible for more than one memory card to be accessed at the same time.

Safely Removing Memory Cards and the Memory Card Gateway™

Removing Memory Cards

To safely remove memory cards from your Memory Card Gateway™ take special precaution to ensure that there is no data being written to or read from the memory card.

When the memory card is not transmitting data, the corresponding LED will be lighted but NOT flashing. Also, make sure that there are no open files or running programs from the memory card.

For Windows:

- Open Windows Explorer and locate the icon of the memory card to be removed.
- 2. Right click on the icon and select Eject.
- 3. Once the corresponding LED for the card to be removed turns off, carefully pull out the card from the slot.

Removing the Memory Card Gateway IM

To properly remove your Memory Card GatewayTM, disable the device before unplugging it from the computer. The method to disable the device will vary based on the operating system of the computer. Refer to the instruction manual of the computer for details on how to do this.



<u>Warning</u>: DO NOT remove memory cards or unplug the device while any LED is flashing. Removing memory cards during data transmission may crash your computer and cause you to lose valuable data.

In the case of Windows XP:

 Locate the 'Safely Remove Hardware' icon in the icon tray at the lower right-hand corner of your computer screen next to the system clock. You can move the mouse pointer over the icons until you see the 'Safely Remove Hardware' label.



- 2. Double-click on this icon to open the 'Safely Remove Hardware' window.
- 3. Select the hardware device named USB Mass Storage Device.
- 4. Click on the Stop button and a confirmation window will appear.
- 5. Click OK at the confirmation window to confirm the action.
- 6. Close the 'Safely Remove Hardware' window by clicking on the Close button.
- 7. Now it is safe to unplug the device from the computer.



<u>Warning</u>: Unplugging the device while data is being transmitted may crash your computer and cause you to lose valuable data.

How do I...

Copy files between memory card and computer

You can use your Memory Card GatewayTM to back-up, copy, and transfer files between your memory card(s) and your computer. Since your Memory Card GatewayTM assigns the memory card slots as removable disks on your computer, you can manage your files in the exact same manner as you manage the files on your computer.

Copy files directly from a memory card to other memory cards in different slots

Since your Memory Card Gateway™ has 4 individual memory card slots, you have the flexibility to back-up, copy, and transfer files directly from one memory card to another without using temporary storage space on your computer.

Simply use the file management program on your computer to transfer the desired files from the *source* memory card location to the *target* memory card location directly.

Copy files from a memory card to another memory card of the same type

In order to copy the contents of one memory card to another memory card of the same type, create a temporary storage space for the files you would like to copy.

One way to do this is to use the hard disk drive of your computer:

- 1. Create a folder on the hard disk drive of your computer and name with a name that is easy to remember. For instance, you can name it "*Temp Swap*" to remind you that it is a temporary swap location.
- 2. Insert into the device the *source* memory card where your original files are stored.
- 3. Copy the desired files from your *source* memory card to the newly created *Temp Swap* folder on your hard disk drive.
- 4. After the file copy is complete, remove the *source* memory card and insert the *target* memory card.
- 5. Copy the files from the *Temp Swap* folder on your hard disk drive to the *target* memory card.
- 6. After you confirm that all of the original files have been copied to the *target* memory card, delete the folder named *Temp Swap* from your hard disk drive.
- 7. You have successfully copied the desired files from the *source* memory card to the *target* memory card.

Driver Installation

For Windows 98/SE, Windows 2000, and Macintosh OS 8.6, device driver installation is required.

For all other supported computer operating systems, device driver installation is not required.

For all Windows operating systems, it is recommended that you install the Disk Monitor Utility from the Resource Disc. This program will assign descriptive icons and labels for the device.

Windows Operating System

The installation procedure for all supported Windows operating systems (98/SE, 2000, ME, XP Home, and XP Professional) follow the same general process.

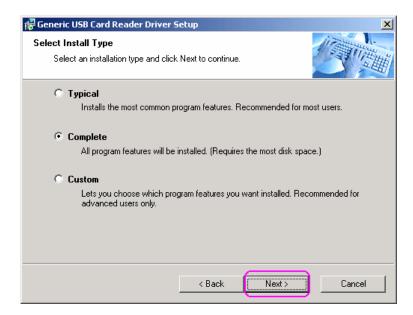
The step-by-step instructions for Windows operating systems are as follows:

- 1. Close all programs running on your computer.
- 2. Insert the Resource Disc into the CD-ROM drive.
- 3. Locate and open the "Driver" folder on the Resource Disc by using Windows Explorer.
- 4. Double-click on the Setup icon.
- 5. Read the Welcome Message in the first window and click Next.
- 6. (Windows ME and XP only) Plug in your Memory Card Gateway at the prompt and click Yes.
- 7. Select the option that you wish to use and click Next. (It is recommended that you choose the *Complete* option for installation.)

Note: The driver installation portion of the Resource Disc contains 2 programs: (1) the actual device drivers and (2) the Disk Monitor Utility.

The <u>device drivers</u> (required by Windows 98/SE and 2000) allow your computer to recognize and use the device.

The <u>Disk Monitor Utility</u> tells your computer to replace the generic removable disk icons and labels with descriptive icons and labels (as explained on page 8). This is optional.

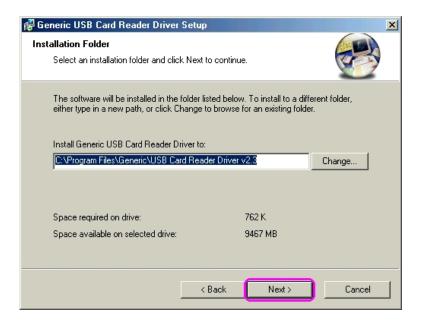


Selecting Typical will install only the device drivers.

the programs to install.)

- Selecting *Complete* will install both the device drivers and the Disk Monitor Utility.
- Selecting Custom will allow you to choose exactly which programs you will install.
 (If you select Custom, there will be an extra window for you to select
- 8. (Windows ME and XP only) Confirm that the driver installation is not required and that you still want to install the Disk Monitor Utility and click Next.

9. Confirm the default installation folder (or enter your own location preference) and click Next.

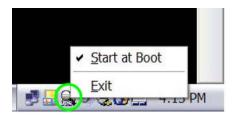


- 10. Confirm the installation details and click Next.
- 11. After the installation is complete, click Finish to restart your computer.

12. Once the computer has restarted, you will see the Disk Monitor Utility icon at the lower right-hand corner of your computer screen.



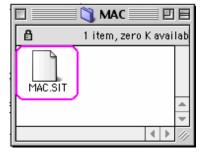
To change the preferences for the Disk Monitor Utility, move the mouse pointer over the Disk Monitor Utility icon and right-click.



13. If your device is not connected, connect it now. Your Memory Card $Gateway^{TM}$ is ready for use.

Macintosh Operating System

- 1. Close all programs running on your computer.
- 2. Insert the Resource Disc into the CD-ROM drive.
- 3. Locate and open the CD-ROM icon on your desktop to see the contents of the Resource Disc.
- 4. Open the "Driver" folder.
- 5. Open the "Mac" folder.
- 6. Locate the "MAC.SIT" file and copy it to your desktop.



7. From your desktop, double-click on the "MAC.SIT" file. A folder named "Mac" will appear on your desktop.



8. Open the "Mac" folder and click on "USB 2.0".



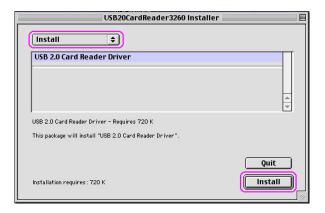
9. Open the "English" folder.



10. Double-click on the "USB2.0CardReader3260 Installer" file.



11. Select "Install" at the upper-left corner of the window and click on the Install button at the lower-right corner.



12. At the restart warning, click Yes.



13. Once the installation has completed, click Restart to restart your computer.



14. Once the computer has restarted, you can connect your Memory Card Gateway™ to your computer and begin using it.

Uninstalling Disk Monitor Utility (Windows only)

If you installed the Disk Monitor Utility from the Resource Disc, you may uninstall this program and still use your Memory Card Gateway™ on the computer.

To uninstall the Disk Monitor Utility follow these steps:

- 1. Close all programs running on your computer.
- 2. From your desktop, click on the Start button and locate the "Program" folder.
- 3. Within the "Program" folder locate the folder that contains the file called "Uninstall Generic USB Card Reader Driver v2.3".

Note: If you accepted the default settings when installing the Disk Monitor Utility, then the file will be in the folder at the end of the following path:

Start Menu → Programs → Generic USB Card Reader Driver v.2.3

- 4. Double-click on the "Uninstall Generic USB Card Reader Driver v2.3" file.
- 5. Confirm the action by clicking Yes.
- 6. At the Restart Computer prompt, click Yes.
- 7. Click Close to complete the uninstall procedure and restart your computer.
- 8. After the computer has restarted, the Disk Monitor Utility will be removed and you can still use your device as usual.
 - The only difference is that you will see the generic removable disk icons instead of the descriptive icons and labels.

Troubleshooting and Technical Support

Refer to the following advice for using and troubleshooting your Memory Card GatewayTM.

My device is plugged into my computer and the red Power LED is NOT on.

- Make sure that the operating system for your computer is on the list of supported operating systems as listed on page 5.
- Make sure that you have installed the device drivers required by certain operating systems as listed on page 5.
- The device may have been disabled on the computer. You can reactivate the device by:
 - o Rebooting the computer.
 - Or, unplugging the USB cable and plugging it back in the computer.
- Make sure that the USB cable is working properly. You can test this by:
 - Attaching another device with the same USB cable.
 - o Or, using a different USB cable to connect your device.
- Make sure that the USB port on your computer is working properly. You can test this by:
 - Plugging in a different UBS device to the computer.

My device is plugged into my computer, the red Power LED is on, and at least 1 memory card is inserted, but I can't access my data files.

- Try to access the memory card contents by using the file management program on your computer.
 - For Windows, open My Computer or Windows Explorer and check that the 'Removable Disk (x:)' icons for your device are present.
 Search for the icon that corresponds with the memory card that you have inserted. (See page 7 for icon mapping details.)
 - For Macintosh, look on your desktop to see if the icons corresponding with your device are present. Search for the icon that corresponds with the memory card that you have inserted.

- For Linux, use the file management program to find the drive mappings for your device. Search for the drive mapping that corresponds with the memory card that you have inserted.
- Make sure that the memory card is properly inserted by:
 - Checking that the corresponding LED for that memory card is lighted.
 - If it is not lighted, remove the memory card and reinsert it properly. (See page 11 for instructions.)
 - If the corresponding LED still does not light up, test the memory card on a digital camera or other device to make sure that the memory card is in working condition.
- Try to reattach the device by:
 - Disabling the device on your computer, unplugging it, and plugging it back in again.

My device lets me read files from the memory cards, but I can't write or copy any files to the memory card.

- Check to make sure that the memory card does not have a write protection or lock mechanism.
 - Remove the memory card from the device and check to see if it has a write protection switch.
 - If it does, set the switch so that the memory card is not write protected.
 - If it does not, there may be a problem with the memory card or file that you are trying to copy. Check with the memory card manufacturer for further options.

Technical Support Contact

If you are still having troubles using your Memory Card Gateway™, please contact Digital Foci, Inc. technical support at (310) 763-9100.

Appendix

Technical Specifications

Model no. MCG-120

Interface USB 2.0 (compatible with USB 1.1)

Power (No power adapter required)

Transfer rate USB 2.0: up to 480 Mbps

USB 1.1: up to 12 Mbps

Certifications FCC Class B, CE

OS compatibility Windows 98/SE, 2000, ME, XP Home/Pro

Macintosh OS 8.6 and higher

Linux OS kernel versions 2.4.x and higher

Dimensions (L x W x H) 3.6" x 2.1" x 0.6" / 9.0 x 5.5 x 1.6 cm

Weight 1.4 oz. / 40g

Operating temperature $40^{\circ}\text{F} \sim 104^{\circ}\text{F} / 5^{\circ}\text{C} \sim 40^{\circ}\text{C}$

Storage temperature $-4^{\circ}F \sim 140^{\circ}F / -20^{\circ}C \sim 60^{\circ}C$

Tested Memory Card Compatibility

Your device has been tested to work with memory cards from the manufactures listed in the table below. This table contains only those memory cards that have been tested and do not include memory cards that will work with the device but have not been tested. Memory cards from manufacturers or with capacities not listed in this table are not guaranteed to work properly with the device. Use at your own risk.

Memory Card Format Manufacturer/Type	Max. Tested Capacity
CompactFlash	
SanDisk	1GB
Kodak	8MB
Lexamedia	32MB
Hitachi	32MB
Nikon	8MB
Canon	8MB
Epson	8MB
Buffalo	96MB
Feiya	64MB
PQI	128MB
Ritek	512MB
LeadData	128MB
KingNet	64MB
Pretec	16MB
D-Media	32MB
U-Conn	16MB
King Bank	64MB
Memory Stick	
Sony / MS PRO	1GB
Sony / MS Duo	128MB
Sony / MS PRO Duo	256MB
Sony / MS	128MB
SanDisk / MS	128MB
Apacer / MS	128MB
Lexar / MS	128MB
Sony / MS Rom	8MB
Sony / MagicGate MS	64MB

Memory Card Format Manufacturer/Type	Max. Tested Capacity
Smart Media	
Standard	64MB
With ID	128MB
ROM	8MB
MicroDrive	
IBM	1GB
MagicStor	2.2GB
MultiMedia Card	
SanDisk	128MB
Infineon	32MB
Hitachi	128MB
Pretec	32MB
D-Media	32MB
Apacer	32MB
Hitachi MM2	128MB
Transcend MM2	32MB
Pretec MM2	128MB
PQI MM2	128MB
SD Card	
Panasonic	256MB
Toshiba	128MB
SanDisk	128MB
IO Data	512MB
Hagiwara	16MB
miniSD	
Toshiba	64MB
xD-Picture Card	
Fuji Film	512MB

Limited Warranty

As the original purchaser of this product, you received these warranties from Digital Foci, Inc.

Your Memory Card GatewayTM (hereafter referred to as "Device") will be free from defects in material and workmanship and will perform in substantial compliance with your user documentation accompanying the Device for 1 year from the purchase date providing proper use of the Device.

Your warranty rights will be honored so long as you read and follow your user documentation for all aspects of operating the Device. Any unauthorized or improper use of the Device may cause your warranty to become void.

If you think that there is a problem or defect with your Device, please contact Digital Foci, Inc. at (310) 763-9100.

Disclaimer

This limited warranty is the only warranty Digital Foci, Inc. makes for the Device. To the extent allowed by Law, no other warranty applies, whether expressed, implied, or statutory, including any warranty of merchantability, of fitness for a particular purpose, or of non-infringement. This warranty does not cover accidental damage, wear and tear, or consequential or incidental loss. Under no conditions is Digital Foci, Inc. liable for loss of, or damage to, a computer; nor loss of, or damage to, programs, records, or data; nor any consequential or incidental damages, even if Digital Foci, Inc. has been informed of their possibility.

Additional Rights

Some states or countries do not allow exclusion or limitation of incidental or consequential damages, or limitations on the length of an implied warranty, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or country to country.

FCC Compliance

FCC Rules and Regulations – Part 15

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operations.

The board has been tested and verified to be within the energy emission limits for Class B digital devices as defined in Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential situation. This board generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Installed correctly, it probably will not interfere with your radio or TV. However, we do not guarantee the absence of interference.

If you modify the board in any way, without approval from Digital Foci, Inc., your board may violate FCC regulations. Violation of FCC regulations may cause the FCC to void your rights to use the modified board.

If you suspect this board is causing interference, power off and on the device while your radio or TV is showing interference. If the interference disappears when you turn the device off and reappears when you turn the device on, something in the device is causing interference.

To reduce interference, try these suggestions:

- Change the direction of the radio or TV antenna.
- Increase the separation between the device and radio or TV.
- Connect the device into an outlet on a circuit different from that to which the radio or TV is connected.

If these suggestions don't help, consult your computer dealer or an experienced radio/TV technician for more suggestions.